

# Venvu 71 TM Ni-G

MCAW - Metal-cored Wire



## Classifications

EN ISO 17632-A	EN ISO 17632-B	AWS A5.28
T50 6 1Ni M M 1 H5	T576T15-1MA-N2-H5	E80C-Ni1H4

## Characteristics and typical fields of application

Seamless, Nickel alloyed, metalcored wire for single or multipass welding of carbon, carbon-manganese and high strength steels with Ar-CO<sub>2</sub> shielding gas. Features include: high yield, good weldability, excellent bead appearance, no spatter or slag and exceptional mechanical properties at low temperatures (-60°C). This wire is especially suitable for rootpass welding in off-shore and pipeline applications.

## Base materials

**EN 10207:** P253S - P265S - P275SL, **EN 10025-2:** S235JR-J0-J2 - S275JR-J0-J2 - S355JR-J0-J2-K2 - S450J0, **EN 10025-3:** S275N - S275NL - S355N - S355NL - S420N - S420NL - S460N - S460NL, **EN 10025-4:** S275M - S275ML - S355M - S355ML - S420M - S420ML - S460M - S460ML, **EN 10028-2:** P235GH - P265GH - P295GH - P355GH, **EN 10028-3:** P275NH - P355NH - P460NH - P275NL1 - P275NL2 - P355N - P355NL1 - P355NL2 - P460NL1 - P460NL2, **EN 10028-6:** P355QH - P460QH - P500QH - P355Q - P460Q - P500Q - P355QL1 - P460QL1 - P500QL1 - P355QL2 - P460QL2 - P500QL2, **EN 10025-6:** S460Q - S500Q - S460QL - S500QL - S460QL1 - S500QL1, **EN 10028-5:** P355M - P420M - P460M - P355ML1 - P420ML1 - P460ML1 - P355ML2 - P420ML2 - P460ML2, **EN 10208-1:** L210GA - L235GA - L245GA - L290GA - (X42) - L360GA - (X52), **EN 10208-2:** L245NB - L245MB - L290NB - L290MB - (X42) - L360NB - L360QB - L360MB - (X52) - L415NB - L415QB - L415MB (X60) - L450QB - L450MB - (X65) - L485QB - L485MB - (X70) - L555QB - L555MB - (X80), **EN 10208-4:** 11MnNi5-3 - 13MnNi6-3

## Typical analysis of all-weld metal (wt.-%)

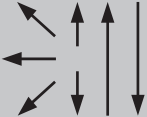
C	Mn	Si	P	S	Ni	GAS
0.06	1.30	0.50	< 0.025	< 0.025	1.00	M21

## Mechanical properties of all-weld metal – typical values (minimum values)

Shielding gas	Heat-Treatment	Yield strength R <sub>p0.2</sub>	Tensile strength R <sub>m</sub>	Elongation A (L <sub>0</sub> =5d <sub>0</sub> )	Impact work J CVN
		MPa	MPa	%	-60°C
M21	AW	500	560	20	110
M21	S: 580° Cx3h	500	560	26	90
M21	N: 920° Cx30'	360	520	33	100

Untreated, as welded – shielding gas Ar + 18% CO<sub>2</sub>

## Operating data

	Ø (mm)	Spool	Weight (Kg)	Current A	Voltage V
	1.00	B300	16	90 - 280	16 - 30
	1.20	B300	16	120 - 350	17 - 32
	1.40	B300	16	150 - 400	18 - 33
	1.60	B300	16	200 - 450	20 - 34

Other spool types on request

## Approvals

TÜV • DNV